UPSAG/Np Technical Group
Perennial Stream Survey: 2001 Pilot Project Data Dictionary

This data dictionary is designed to provide definitions of the column headers on the formatted spreadsheets (Excel) for standard project data entry and incorporation in a proposed GIS database. Two data entry forms are provided including "Header and Basin Point Data" and "Channel Reach Data." The dictionary is formatted as two tables. Data entry spreadsheet files will be sent separately.

The "Field Name" column on each table corresponds to column headings listed on the spreadsheet forms used for data entry. Field names in **bold** type are key database fields and must be repeated exactly on different spreadsheets where indicated. Underlined row titles identify database fields that are essential for calculations and cannot be left blank or the calculations will not run.

The "Data Types" column identifies the limitations for each field name's information. If data is not entered consistent with the data type limitations, the database or calculation may not function correctly. The following provides definitions for the data types found on the spreadsheets:

- "char" = character - data can be either letters or numerals. The number following "char" describes how many digits or letters should be in the field. For example, "char 2" means that two letters are required whereas "char 1-20" means that any combination of numbers and characters up to 20 maximum can be entered. Do not include punctuation or other symbols.
- "dec" = decimal – data must be numerals with one period or decimal point included. Numbers after the "dec" indicate the range of numbers and decimals expected. For example, "dec 1,2" means one whole number followed by two decimal places (e.g., 3.43). Another example is "dec 1-4,1" which means that up to four whole numbers can be entered, but with only one decimal place (e.g., 1000.9).
- "int" = integer - data entered must be whole numbers only. , e.g., "3200" feet in elevation or reference point "16".
- "note" = extended notes - data can be either letters or numerals or punctuation or other symbols (e.g., !, @, #, etc.).
- "date" = numeric date - data must be entered in the form of mm/dd/yyyy (e.g., 09/07/2001).

The "Req" column identifies whether the field is required to be filled by either field data or a default code for missing data points. A shaded "Y" means that it is required and an "N" means that it is not required and leaving blank is appropriate where no field data has been collected.

The "Description" column provides definitions for each field name and clarifies requirements.

Please refer to the dictionary as you enter data from survey sheets. The spreadsheet entry program will accept whatever you enter, so you cannot count on the computer to notify you of incorrectly entered data. Also, do not enter spaces, dashes or any other extraneous marks unless requested or you are in a "note" field. Quality Control: It is required that whoever enters the data into the spreadsheet cross check the finished entered data with the original field forms to ensure accuracy. Check for errors or missing data.

Table 1. Perennial Stream Survey – Header and Basin Point Data

Field Name	Data Type	Req	Description
GIS ID	char 1-8	Y	Key field. Leave blank – will be filled in automatically at GIS entry stage.
Coop Code ID	char 3	Y	Key field. Cooperator code identification: A three-letter code to identify the individual participants contributing data. Use only one of the following codes (all caps required): **TCG** = The Campbell Group; **DFW** = Washington Department of Fish and Wildlife; **COL** = Colville Tribe; **HOH** = Hoh Tribe; **PGS** = Port Gamble S'Klallam Tribe; **SPO** = Spokane Tribe; **SSC** = Skagit System Cooperative; **SUQ** = Suquamish Tribe; **TUL** = Tulalip Tribe; **YAK** = Yakama Nation; **LF = Longview Fiber**, or other unique and consistently applied three-letter code.
SITE/PSS #	char 1-6	Y	Key field. Site or Perennial Stream Survey identification number: A unique multi-character identifier (numbers and letters okay) used to identify the specific stream site surveyed (e.g., "**162**"). Where repeat or total tributary surveys use the same site numbers or are otherwise repeated, add a letter or number code to make unique (e.g., "**162A**", "**162B**", and "**162C**").
Survey Date	date mm/dd/yyyy	Y	Key field. Survey date: Two integer month, two integer day, and four integer year identify date data was collected in the field (e.g., "**09/07/2001**").
Lead Contact – First Name	char 1-20	Y	First Name of Lead Contact: identifies first name of lead survey contact responsible for collection and management of field data.
Lead Contact – Last Name	char 1-20	Y	Last Name of Lead Contact: identifies last name of lead survey contact responsible for collection and management of field data.
Lead Contact - Affiliation	char 1-40	Y	Affiliation of Lead Contact: identifies the group, company, agency, tribe, or other entity to which the data belongs.
WAU Name	char 1-40	N	Official Watershed Analysis Unit name as defined by WADNR
WAU #	char 6	N	Official Watershed Analysis Unit six character number as defined by WADNR.
Basin Veg Cat	int 1	N	Basin vegetative category: identifies dominant upslope forest seral stage of basin surveyed. Use only one of the following: Westside – **1** = 1 to 15 years; **2** = 16 to 35 years; **3** = greater than 35 years; or Eastside – **4** = sparse; **5** = moderate; **6** = mature.
Basin Veg Cat Source	char 1-40	N	Identifies source for basin vegetation category information.

Stream Name	char 1-20	N	Stream name as identified in the WDF WRIA Stream Catalog or on a USGS 7.5 minute Topographic map – otherwise leave blank.
2-Day Prior Precip (mm)	int 1-4	Y	Record actual or estimated amount of precipitation in millimeters (mm) that fell on survey reach in the 2 days immediately prior to conducting the survey. No precipitation is recorded as "0" and a trace is recorded as "1."
Type Survey (M/T/R)	char 1	Y	Type of survey conducted: Use only one of the following - **M** = Main Thread Survey; **T** = Total Tributary Survey; **R** = Repeat Survey (Intra-annual study).
Site Selection Method (R/P)	char 1	Y	Identifies whether the survey was conducted on a randomly selected new or pre-selected resurvey of pre-2001 sites. Use only one of the following: **R** = randomly selected site; or **P** = previously selected site (resurvey) – includes same season repeat surveys.
Reg Default Basin Area (13/52/300)	int 2-3	Y	Regulatory Default Basin Area: Record which default basin area survey was conducted in per WAC 222-16-031(4). The three choices include: **13** = Western Washington Coastal Zone locations; **52** = other Western Washington locations; and **300** = Eastern Washington locations.
Survey Direction (UP/DN)	char 2	Y	Direction of survey data collection: Determined by segment numbering sequence. Use only one of the following – **UP** = Data collected (segment numbers increase) in the upstream direction; or **DN** = Data collected (segment numbers decrease) in the downstream direction.
Segment # @ Pp	Int 1-3	Y	Segment number at **Pp** Point (a.k.a. "PIP"): Point below which flow (FW or SW categories) is continuous to downstream end of survey reach. Above this point, flow may be either spatially intermittent (discontinuous) or channel is dry to channel head.
Pp Long (deg min sec)	char 9	N	Pp Point: longitude coordinate using degrees, minutes, and seconds (e.g., "127 46 22" – 9 characters including spaces).
Pp Lat (deg min sec)	char 8	N	Pp Point: latitude coordinates using degrees, minutes, and seconds (e.g., "43 46 22" – 8 characters including spaces).
Calc 1 Pp Basin Area (acres)	int 1-4	N	Calculated Pp Point Basin Area in acres: if conducted by participant, record the calculated basin area rounded to nearest acre (1-9999).
Calc 1 Pp Basin Area Method	char 1-40	N	Calculated Pp Point Basin Area Method: Identifies the method used to calculate basin area such as DNR stereo aerial photographs, field identification, etc.
Segment # @ Pd	Int 1-3	Y	Segment number at **Pd** Point (a.k.a. "SIIP"): Point below which is spatially intermittent (discontinuous – FP, SP) or continuous (FW or SW categories) to Pp or downstream end of survey reach. Above this point, channel must be dry to channel head. Duplicate Pp data if Pd point coincides in same

			location.
Pd Long (deg min sec)	char 9	N	Pd Point: longitude coordinate using degrees, minutes, and seconds (e.g., "127 46 22" – 9 characters including spaces).
Pd Lat (deg min sec)	char 8	N	Pd Point: latitude coordinates using degrees, minutes, and seconds (e.g., "43 46 22" – 8 characters including spaces).
Calc 1 Pd Basin Area (acres)	int 1-4	N	Calculated Pd Point Basin Area in acres: if conducted by participant, record the calculated basin area rounded to nearest acre (1-9999).
Calc 1 Pd Basin Area Method	char 1-40	N	Calculated Pd Point Basin Area Method: Identifies the method used to calculate basin area such as DNR stereo aerial photographs, field identification, etc.
Segment # @ Ph	int 1-3	N	Segment number at **Ph** Point (a.k.a. "Channel Head"): Leave blank if not collected. Point immediately below which there is some category of channel other than "NC" or No Channel. Channel may be dry or have either spatially or continuous flow categories to Pd, Pp or downstream end of survey reach. Above this point, there is no channel to basin edge. Duplicate Pp or Pd data if Ph point coincides in same location.
Ph Long (deg min sec)	char 9	N	Ph Point: longitude coordinate using degrees, minutes, and seconds (e.g., "127 46 22" – 9 characters including spaces).
Ph Lat (deg min sec)	char 8	N	Ph Point: latitude coordinates using degrees, minutes, and seconds (e.g., "43 46 22" – 8 characters including spaces).
General Notes	note 1-500	N	**PN (non flowing spatially intermittent water. Where should this go?)** Provides space to record further information regarding the Np/Ns break point up to 500 spaces long (including spaces and punctuation).
Driving Directions	note 1-500	N	Provides space to record driving directions for accessing survey site and landowner contact information.

Table 2. Perennial Stream Survey – Channel Reach Data

Field Name	Data Type	Req	Description
GIS ID	char 1-8	Y	Key field. Leave blank – will be filled in automatically at GIS entry stage.
Coop Code ID	char 3	Y	Key field. Cooperator code identification: A three-letter code to identify the individual participants contributing data. Use only one of the following codes (all caps required): **TCG** = The Campbell Group; **DFW** = Washington Department of Fish and Wildlife; **COL** = Colville Tribe; **HOH** = Hoh Tribe; **PGS** = Port Gamble S'Klallam Tribe; **SPO** = Spokane Tribe; **SSC** = Skagit System Cooperative; **SUQ** = Suquamish Tribe; **TUL** = Tulalip Tribe; **YAK** = Yakama Nation; **LF = Longview Fiber**.
SITE/PSS #	char 1-6	Y	Key field. Site or Perennial Stream Survey identification number: A unique multi-character identifier (numbers and letters okay) used to identify the specific stream site surveyed (e.g., "**162**"). Where repeat or total tributary surveys use the same site numbers or are otherwise repeated, add a letter or number code to make unique (e.g., "**162A**", "**162B**", and "**162C**").
Survey Date	date mm/dd/yyyy	Y	Key field. Survey date: Two integer month, two integer day, and four integer year identify date data was collected in the field (e.g., "**09/07/2001**").
Segment #	int 1-3	Y	Key field. Identifies the unique segment number from the start to the end of the survey. The starting segment number can be a "0" or any other number up to "999." It is acceptable to fill in a missing starting segment number that has no other segment data attached if you conducted your survey that way.
Seg Data Direction (UP/DN)	char 2	Y	Segment Data Direction: identifies whether channel data represents segment conditions upstream or downstream of the segment number. Use only one of the following two codes: **UP** = Upstream; or **DN** = downstream.
Seg Long (deg min sec)	char 9	N	Identifies the longitude of segment break location if collected - record coordinates using degrees, minutes, and seconds (e.g., "127 46 22" – 9 characters including spaces).
Seg Lat (deg min sec)	char 8	N	Identifies the latitude of segment break location if collected – record coordinates using degrees, minutes, and seconds (e.g., "43 46 22" – 8 characters including spaces).
Distance from Start (m)	dec 1-4,1	Y	Identifies the total distance of that segment break from the start of the survey – recorded to the nearest 0.1 meters. The distance to the starting segment number should always be "0.0".

Flow Cat	char 1-2	Y	Flow category: identifies dominant segment flow condition using only one of the following seven codes: **FW** = Flowing Water; **SW** = Standing Water; **FP** = Flowing Pocket Water; **SP** = Standing Pocket Water; **D** = Dry (no flow); **U** = Unknown; or **O** = Obscured.
Chan Cat	char 1-3	Y	Channel category: identifies the dominant segment channel category using only one of the following five codes: **DC** = Defined Channel; **PDC** = Poorly Defined Channel; **MC** = Modified Channel; **PC** = Piped Channel; or **NC** = No Channel.
BFW (m)	dec 1-2,1	N	Bankfull width: identifies the segment's mean bankfull width – recorded to the nearest 0.1 meters.
BFD (m)	dec 1,2	N	Bankfull depth: identifies the segment's mean bankfull width – recorded to the nearest 0.01 meters.
UP Grad (%)	int 1-3	N	Upstream Percent Gradient: identifies the segment gradient of the channel in the upstream direction – recorded to the nearest whole percent (e.g., "3" or "52" or "100")
DN Grad (%)	int 1-3	N	Downstream Percent Gradient: identifies the segment gradient of the channel in the downstream direction –record to nearest whole percent (e.g., "3" or "52" or "100")
Mean Seg Grad (%)	int 1-3	N	Mean Segment Percent Gradient: identifies the calculated or single mean segment gradient of the channel (regardless of direction) – record to nearest whole percent (e.g., "3" or "52" or "100")
Dom Sub	char 1	N	Dominant Substrate: identifies the segment's dominant stream bed substrate using only one of the following six codes: **F** = Silt/muck/mud (< 0.625mm); **S** = Sand (0.625-2.0mm); **G** = Gravel (2.0-64.0mm); **C** = Cobble (64.0-256.0mm); **B** = Boulder (> 256mm); or **R** = Bedrock.
Assoc Feat 1	char 2	N	Associate Feature 1: identifies primary factor associated with Np/Ns point break using one of the following codes: **SP** = Spring; **SE** = Seep; **PS** = intersection with Perennial Stream Tributary Channel flow; **WE** = Wetland; **BP** = Beaver Pond; **GB** = Gradient Break; **DS** = evidence of Debris Slide; **RC** = Road Crossing; **RD** = visible Road Drainage inputs; *WI* = Water Intake or diversion; **WS** = Wet Site vegetation patches; **SC** = significant change in Substrate Characteristics; **OT** = Other items potentially affecting the change in flow category. NEW – **CH** = Channel Head if survey conducted to this point. **RS = roots; WD = woody debris**
Assoc Feat 2	char 2	N	Associate Feature 2: Other associated feature factor recorded using one of the codes listed above. If none, leave blank.
Assoc Feat 3	char 2	N	Associate Feature 3: Other associated feature factor recorded using one of the codes listed above. If none, leave

			blank.
Assoc Feat 4	char 2	N	Associate Feature 4: Other associated feature factor recorded using one of the codes listed above. If none, leave blank.
Assoc Feat 5	char 2	N	Associate Feature 5: Other associated feature factor recorded using one of the codes listed above. If none, leave blank.
Tributary Change	char 1	N	Identifies segment breaks where tributary survey changes were made. Record "**Y**" (Yes) where the segment number corresponded to either a random (same flow category) or required (higher flow category) selection of alternate tributary. Record "**N**" (No) in all other cases.
Trib Flow Cat	char 1-2	N	Tributary Flow Category: identifies non-survey tributary's flow category – use only one of the seven "Flow Cat" codes listed above. Leave blank otherwise. This occurs where a tributary junction causes a segment break due to either a change in a flow category or change in which tributary the survey continues.
Trib Chan Cat	char 1-3	N	Tributary Channel Category: identifies non-survey tributary's channel category – use only one of the five "Chan Cat" codes listed above. Leave blank otherwise. This occurs where a tributary junction causes a segment break due to either a change in a flow category or change in which tributary the survey continues.
Notes	note 1-500	N	Provides space to record greater quantities of information up to 500 spaces long (including spaces and punctuation).